

## **Abstracts and Proceedings Papers**

### **Electrochemical Testing of Metal Waste Forms**

D. P. Abraham, J. J. Peterson, N. K. Katyal, D. D. Keiser, and B. A. Hilton  
Proc. of the Corrosion 2000 Conf., Orlando, FL, March 26–31, 2000,  
Paper No. 205 (2000)

### **Factors Responsible for Impedance Rise in High Power Lithium Ion Batteries**

K. Amine, M. J. Hammond, J. Liu, C. Chen, D. W. Dees, A. N. Jansen, and  
G. L. Henriksen  
Proc. of the Tenth Int. Meeting on Lithium Batteries, Como, Italy,  
May 28–June 2, 2000, p. 332 (2000)

### **Development of High Power Lithium Ion Batteries for Hybrid Vehicle Application**

K. Amine, J. Liu, A. N. Jansen, A. Newman, D. Simon, and G. L. Henriksen  
Proc. of the 196<sup>th</sup> Electrochem. Soc. Meeting, Honolulu, HI, October 17–  
22, 1999, Vol. 99–24, pp. 389–399 (2000)

### **Olivine LiMePO<sub>4</sub> (Me: Co, Cu) as 4.8 V and 2 V Positive Materials for Lithium Batteries**

K. Amine, H. Yasuda, and M. Yamachi  
Proc. of the 196<sup>th</sup> Electrochem. Soc. Meeting, Honolulu, HI, October 17–  
22, 1999, Vol. 99–25, pp. 311–326 (2000)

### **Test Bench Results of Yuasa Ni/MH Batteries**

I. Bloom, B. W. Cole, A. F. Tummillo, and W. H. DeLuca  
Proc. of the International Fall Fuels and Lubricants Meeting and  
Exposition, SAE International, SAE Technical Paper Series 2000-01-  
2985, Baltimore, MD,  
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Fuels Strategy and Fuel Processor Technology Update for U.S. DOE Fuel Cells for Transportation Program

S. G. Chalk and W. F. Podolski

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Controlled Densification of Mullite for Composite Applications, Innovative Processing and Synthesis of Ceramics, Glasses, and Composites

T. A. Cruse, B. J. Polzin, P. J. Phelan, D. Singh, K. C. Goretta, and A. R. de Arellano-Lopez

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Alumina Composites for Oxide/Oxide Fibrous Monoliths

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Proc. of Ceram. Eng. Sci., **21**–**3**, 589–595 (2000)

Diesel-Fueled Solid Oxide Fuel Cell Auxiliary Power Units for Heavy-Duty Vehicles

H. H. Dobbs, T. R. Krause, R. Kumar, and M. Krumpelt

Proc. of the Fourth European Solid Oxide Fuel Cell Forum, Lucerne, Switzerland, July 10–14, 2000, Ed., J. McEvoy, Vol. 1, pp. 85–94 (2000)

Accessory Minerals and the Alteration of Nuclear-Waste Forms: Insights and Comparisons

R. J. Finch, E. C. Buck, J. A. Fortner, and S. F. Wolf  
Eos **81**, S26 (2000)

EXAFS and XANES Analysis of Plutonium and Cerium Edges from Titanate Ceramics for Fissile Materials Disposal

J. Fortner, E. C. Buck, A. J. Kropf, A. J. Bakel, M. C. Hash, S. B. Aase, and D. B. Chamberlain  
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Electrometallurgical Treatment of Degraded N-Reactor Fuel

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Proc. of the Fourth Topical Meeting on DOE Spent Nuclear Fuel and Fissile Materials Management, San Diego, CA, CD-ROM, Am. Nucl. Soc., La Grange Park, IL, June 4–8, 2000 (2000)

**3 V Manganese Oxide Electrode Materials for Lithium Batteries**

C. S. Johnson and M. M. Thackeray

Abstracts, Tenth Int. Meeting on Lithium Batteries, Como, Italy,

May 28–June 2, 2000, No. 244 (2000)

**Cycling Performance of Stabilized Alpha Manganese Dioxide Electrode Materials**

C. S. Johnson and M. M. Thackeray

Extended Abstracts, 198<sup>th</sup> Meeting of Electrochem. Soc., Phoenix, AZ,

October 22–27, 2000, Vol. 2000–2, No. 83 (2000)

**Recent Developments and Prospects for Layered Manganese Oxide Electrodes for Lithium Batteries**

C. S. Johnson and M. M. Thackeray

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October 22–27, 2000, Vol. 2000–2, No. 67 (2000)

**Electrochemical Processes of Manganese Oxide Materials**

C. S. Johnson and M. M. Thackeray

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in Lithium Batteries, Argonne National Laboratory, Argonne, IL,

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**Electrochemistry and Impedance Analysis of Intermetallic Electrodes for Lithium-Ion Batteries**

C. S. Johnson, J. T. Vaughey, D. W. Dees, A. N. Jansen, M. M. Thackeray,  
T. Sarakonsri, and S. A. Hackney

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**Cycling Performance of Intermetallic Insertion Electrodes in Lithium Batteries**

C. S. Johnson, J. T. Vaughey, and M. M. Thackeray

Abstracts, 4<sup>th</sup> Chicago Battery Workshop, Illinois Institute of Technology,

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**The Effects of Actinides on the Microstructural Development in a Metallic High-Level Nuclear Waste Form**

D. D. Keiser, W. Sinkler, D. P. Abraham, J. W. Richardson, and S. M. McDeavitt  
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***In Situ* XAFS of the Li<sub>x</sub>Ni<sub>0.8</sub>Co<sub>0.2</sub>O<sub>2</sub> Cathode for Lithium-Ion Batteries**

A. J. Kropf and C. S. Johnson

Mater. Res. Soc. Symp. Proc. **590**, 17–26 (2000)

*In Situ* XAFS of Intermetallic Insertion Electrodes for Li-Ion Batteries: A Study of  $\text{Li}_x\text{InSb}$  ( $0 < x < 3$ )

A. J. Kropf, C. S. Johnson, M. M. Thackeray, and J. T. Vaughey  
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Promise and Problems of Solid Oxide Fuel Cells for Transportation

R. Kumar, S. Ahmed, M. Krumpelt, and X. Wang  
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Development of a Mixed Oxide Cermet Dispersion Fuel Using  $(\text{Th},\text{U})\text{O}_2$  in a Zirconium Metal Matrix

S. M. McDeavitt, T. J. Downar, M. C. Hash, S. Revankar, A. A. Solomon, Y. Xu, A. S. Hebden, D. E. Walker, W. Robey, and J. Xiu  
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A Comparison Study of the Processing Methods and Properties of Zirconium Silicate Fibrous Monoliths

A. J. Mercer, G. E. Hilmas, T. A. Cruse, B. J. Polzin, and K. C. Gorecka  
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Reducing the Volume/Weight of the Fuel Post Processor for PEFC Power Systems

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Intercalation Compounds for Battery Materials

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Differential Scanning Calorimetry Study: Kinetics and Thermodynamics of Electrode Reactivity for Lithium Ion Cells

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Small Angle X-Ray Scattering Studies of Carbon Anodes Used in Lithium Rechargeable Batteries

G. Sandi, K. A. Carrado, R. E. Winans, S. Seifert, and C. S. Johnson

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Electrochemical Performance of Sepiolite-Derived Carbon with Lithium Transition Metal Oxide Positive Electrodes

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Thermodynamic and Nonstoichiometric Behavior of the GdBa<sub>2</sub>Cu<sub>2</sub>O<sub>x</sub> System

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Recent Developments in Anode and Cathode Materials for Lithium-Ion Electrochemical Cells

M. M. Thackeray, J. T. Vaughey, and C. S. Johnson

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Intermetallic Negative Electrodes for Lithium Batteries

M. M. Thackeray, J. T. Vaughey, C. S. Johnson

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Mechanistic and In-situ X-ray Studies of Intermetallic Electrodes for Lithium-Ion Batteries

J. T. Vaughey, C. S. Johnson, R. Benedek, M. M. Thackeray, L. Fransson, K. Edstrom, and J. Thomas

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